# STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES Division of Forestry and Wildlife Honolulu, Hawaii 96813

January 26, 2007

Chairperson and Members Board of Land and Natural Resources State of Hawaii Honolulu, Hawaii

Land Board Members:

SUBJECT: Approval of a Permit to the U.S. Forest Service to Use State Land at

Laupāhoehoe, Hamakua, Hawaii and Pu'u Wa'awa'a, Kona, Hawaii as per the Cooperative Agreement for the Hawaii Experimental Tropical Forest.

**Background:** In 1992, President George H.W. Bush signed into law the Hawaii Tropical Forest Recovery Act (Public Law 102-574, 1992), to promote the recovery of Hawaii tropical forests. The Act brought recognition of the value that Hawaii tropical forests provide to the nation and authorized the establishment of the Hawaii Experimental Tropical Forest (HETF) to serve as a center for long-term research and a focal point for developing and transferring knowledge and expertise for the management of tropical forests. On February 24, 2006, the Board approved a Report of Findings for the Establishment of the Hawaii Experimental Tropical Forest and recommended to the Governor the establishment of the Hawaii Experimental Tropical Forest at Laupāhoehoe, Hamakua, Hawaii and Pu'u Wa'awa'a, Kona. On December 8, 2006, the Board approved a Cooperative Agreement with the U.S. Forest Service for research, education, demonstration, and related purposes and the Agreement was signed by the Parties on December 12, 2006.

This request is for approval of the Permit for the U.S. Forest Service and its employees, contractors, agents, and consultants to use State lands as provided by the Cooperative Agreement. The permit follows and implements the provisions of the Cooperative Agreement. Exhibit A to the Permit provides an authorization for the Forest Service to carryout routine operations and maintenance and emergency response activities to run the Experimental Forest. Exhibit A also authorizes the U.S. Forest Service and its assignees to conduct nondestructive research activities such as basic inventory and sampling if approved by the HETF Research Committee. The permit also requires that the Forest Service consult with the Hawaii NARS Manager prior to activities on the Laupāhoehoe NAR and with the DOFAW Pu'u Wa'awa'a Coordinator prior to activities at Pu'u Wa'awa'a.

The Permit and Exhibit A were reviewed and discussed by the Natural Area Reserves Commission at their January 8, 2007 meeting and the Commission recommended approval of the Permit and Exhibit A as submitted herein.

**Analysis:** The Division believes that establishment of an experimental forest on the Island of Hawaii at Laupāhoehoe and Pu'u Wa'awa'a will help achieve the stated objectives of the Hawaii

Tropical Forest Recovery Act to provide an area to conduct research, demonstration and education on management of tropical forests in the Pacific and provide tools to restore and sustainably manage our forest resources. The authorizations provided in the Permit and Exhibit A are routine and necessary for the Forest Service to operate and manage the Experimental Forest and facilities as provided under the Cooperative Agreement. The permit authorizations are for the Forest Service, its employees and those working for it and do not include authorizations for outside researchers who would get permits through the HETF Research Committee and State procedures for issuance of permits for State lands.

#### **RECOMMENDATION**

That the Board approve the permit to the U.S. Forest Service to Use State Land at Laupāhoehoe, Hamakua, Hawaii and Pu'u Wa'awa'a, Kona, Hawaii as per the Cooperative Agreement for the Hawaii Experimental Tropical Forest subject to final review and approval by the Attorney General.

Respectfully submitted,

PAUL J. CONRY Administrator

Attachment 1

APPROVED FOR SUBMITTAL:

PETER T. YOUNG Chairperson

Board of Land and Natural Resources

LINDA LINGLE GOVERNOR OF HAWAI





### STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621 HONOLULU, HAWAII 96809 PETER T. YOUNG
CHARPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

ROBERT K. MASUDA DEPUTY DIRECTOR

DEAN NAKANO ACTING DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEY ANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LAND
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

December 28, draft

#### PERMIT TO USE STATE LANDS

Pursuant to the authority granted by the Board of Land and Natural Resources at its meeting of \_\_\_\_\_\_\_ (Item \_\_\_\_), the U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station, ("USDA Forest Service" or "Permittee"), is hereby granted a non-exclusive permit to use State lands situated at Laupāhoehoe and Pu'u Wa'aawa'a, Hawai'i, identified by tax map key parcel numbers: (3) 3-7-001:002; (3) 3-7-001:012; (3) 7-1-001:001; (3) 7-1-001:004; (3) 7-1-001:004; (3) 7-1-001:006; (3) 7-1-001:007; (3) 7-1-002:001; (3) 7-1-002:013; (3) 7-1-002:002; (3) 7-1-002:008, and as shown on the attached maps, for use as the Hawai'i Experimental Tropical Forest (Laupāhoehoe and Pu'u Wa'awa'a units), in compliance with the herein referenced Cooperative Agreement. The USDA Forest Service is acting through the Institute of Pacific Islands Forestry located in Hilo, Hawaii.

#### Definitions:

"Assigns" means the employees, contractors, agents, and consultants.

"Cooperative Agreement" means the Cooperative Agreement between the State of Hawaii, Board of Land and Natural Resources and the U.S. Department of Agriculture, Forest Service, dated December 12, 2006.

"Hazardous Material" means any pollutant, toxic substance, hazardous waste, hazardous substance, or oil as defined in pursuant to applicable federal law, including, but not limited to, the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), 42 U.S.C. §§ 9601, et seq., the Resource Conservation and Recovery Act, 42 U.S.C. §§ 6901, et seq., the Clean Water Act, 33 U.S.C. §§ 1251, et seq., Clean Air Act, 42 U.S.C. §§ 7401, et seq., the Safe Drinking Water Act, 42 U.S.C. §§ 300f, et seq., the Oil Pollution Act, 33 U.S.C. §§ 2701, et seq., the Toxic Substances Control Act, 15 U.S.C. §§ 2602, et seq., and the Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. §§ 136, et seq., or any state law or regulation promulgated pursuant to such federal law.

This Permit is subject to the following conditions:

- This permit to use State lands shall be effective from the last date shown below and extend for thirty-five years from December 12, 2006, the date the parties entered the Cooperative Agreement.
- 2. This permit to use State lands is a non-exclusive authorization for the USDA Forest Service and its assigns to occupy and use the Hawaii Experimental Tropical Forests for

the purpose of research, education, demonstration, and related purposes. This permit shall be effective for the following general purposes:

- a. To conduct long-term ecological, forestry, hydrological, and other natural resourcesrelated research;
- b. To conduct long-term studies at scales from the plot to the watershed on forestry, conservation biology, endangered species, and invasive species;
- c. To conduct baseline studies and monitor results and benefits of forest management practices on important issues facing Hawaii including but not limited to: weed control, invasive pest control, forest restoration, aquatic ecology, hydrology, ungulate management, forest recreation, recreational hunting, fire control, cultural subsistence gathering, and protection and reintroduction of native plants and animals:
- d. To conduct studies on forest silviculture and sustainable management and to develop new commercial forest products;
- e. To conduct global climate change research;
- f. To attract and conduct multidisciplinary research studies by scientists from federal and state agencies, non-governmental organizations, and universities;
- g. To provide for environmental education and demonstration for groups ranging from school children to continuing education for land managers, natural resource professionals, and the general public;
- h. To form a management/research partnership where information needs and new findings are freely exchanged between the USDA Forest Service and the State; and
- i. To construct, maintain, and improve needed infrastructures, including: a new field station facilities at Laupāhoehoe and renovation of existing structures for use as a field station at Pu'u Wa'awa'a consisting of dormitories, work areas, demonstration/education buildings, and storage facilities, gaging stations in streams, weather stations, eddy covariance towers, and similar devices, maintenance of the existing trail system and development of new trails for access, and maintenance and improvement of existing roads.
- i. To engage in the specific activities listed on Exhibit A to this permit.

Research or activities requiring additional Federal, State, or county permits or approvals, including but not limited to environmental assessments or conservation district use permits, will be subject to the procedures in effect for obtaining such permits or authorizations.

The USDA Forest Service must obtain the prior written consent of the Board before construction of infrastructure or making any major improvements, as outlined in section IV.I of the Cooperative Agreement. Any major improvements, including but not limited to buildings and fences, erected on or moved onto the Premises by the USDA Forest Service shall remain the property of the USDA Forest Service and the USDA Forest Service shall have the right, prior to the termination or revocation of this Permit, or within an additional period the Board in its discretion may allow, to remove the improvements from the Premises.

3. This permit to use State lands constitutes an authorization for the USDA Forest Service and its assigns to conduct activities described herein as authorized under the Cooperative Agreement. For activities conducted by entities other than the USDA Forest Service and its assigns permits to conduct those activities shall be secured as outlined in Sections III and VI through IX of the Cooperative Agreement. The permit or any rights hereunder shall not be sold, conveyed, leased, mortgaged, or otherwise transferred or disposed of. Persons acting under this permit shall carry a copy of the permit or a signed authorization from the USDA Forest Service indicating their name, purpose, and dates of authorization with them at all times while in the permit area and

- shall, upon request, show the permit or signed authorization to any law enforcement officer, or the authorized representative of the Board of Land and Natural Resources.
- 4. USDA Forest Service shall insure that in the exercise of this permit to use State lands, it shall comply with all laws, statutes, ordinances, rules and regulations of the Federal, State, and county governments affecting the permit area. In addition, prior to activities in Laupāhoehoe Natural Area Reserve, USDA Forest Service shall ensure that proposed activities are to be performed in a manner which is consistent with NARS management objectives, HRS § 195-1 and in consultation with the Hawaii Island Natural Area Reserves System Area Manager to ensure that proposed activities remain consistent with NARS objectives and management actions. Prior to activities in Pu'u Wa'awa'a, USDA Forest Service shall ensure that proposed activities are to be performed in a manner consistent with the Pu'u Wa'awa'a Management Plan and in consultation with the Pu'u Wa'awa'a Coordinator.
- 5. In the event any unanticipated sites or remains such as bone or charcoal deposits, human burials, rock or coral alignments, pavings or walls are encountered USDA Forest Service, its contractors, and consultants shall immediately stop work and contact the State Historic Preservation Division in Kapolei at (808) 692-8015.
- 6. USDA Forest Service agrees to consult regularly with the State, including the appropriate DLNR land manager, on proposed and ongoing activities within the permit area, to ensure open and full communication and to minimize conflicts and maximize benefits between planned and ongoing research projects and between research projects and land management.
- 7. USDA Forest Service, through the Hawaii Experimental Tropical Forest Research Committee established under the Cooperative Agreement, agrees to consult regularly with the State, including:
  - a. Providing a copy of the annual report submitted to Congress as required by section 607 of the International Forestry Cooperative Act of 1990, as amended by the Hawaii Tropical Forest Recovery Act:
  - b. Providing an annual report on the status of approved new and ongoing research (including the primary investigator, the research topic, the location for the research, dates of field research, date of anticipated results, and contact information for the primary investigator):
  - c. Providing an annual report on the number of educational tours and total number of participants; and
  - d. Annually reporting on the challenges faced in the administration of the Experimental Forest.
- 8. The USDA Forest Service will maintain the improvements on the land that are being used by the Forest Service or its assigns. The USDA Forest Service will keep the permit area and improvements in a clean, sanitary, and orderly condition. Disturbance of native vegetation and native wildlife shall be avoided as much as possible. The USDA Forest Service will not make, permit, or suffer, any waste, strip, spoil, nuisance or unlawful, improper, or offensive use of the permit area. Precautions shall be taken to prevent introductions of plants and animals not naturally present in the permit area, including inspection and cleaning of clothing, equipment, and vehicles. At all times with respect to the permit area, USDA Forest Service will use due care for public safety and will use appropriate precautions and measures to minimize inconveniences to surrounding residents, landowners, lessees, and the public in general.

- 9. The State will remain primarily responsible for normal land management functions, including but not limited to control of public access, fire suppression, law enforcement, regulation of hunting and grazing activities, invasive species management, and forest disease, insect, and ungulate control. The Board will be responsible for maintenance of all improvements not used, built or placed on the land by the USDA Forest Service. The Board reserves the right for its employees, agents or representatives to enter or cross any portion of the permit area at any time.
- 10. Liability for any loss, damage, claim, demand, or action, caused by, arising out of or connected with the operations authorized by the Cooperative Agreement shall be governed by applicable State and Federal law. To the extent that the USDA Forest Service requires third parties, including but not limited to its contractors or consultants, to procure liability insurance or to indemnify the Forest Service, the USDA Forest Service shall also require such third parties to insure and indemnify the State.
- 11. This permit may be modified at any time by mutual agreement of the Director, Institute of Pacific Islands Forestry, USDA Forest Service, and the Board of Land and Natural Resources.
- 12. Permittee and its assigns shall not cause or permit the escape, disposal or release of any hazardous materials except as permitted by applicable federal and state law. Proposed use of hazardous materials in research activities will be disclosed to the State through the research review and approval procedures of the Hawaii Experimental Tropical Forest Research Committee and the processes for activities authorizations prescribed by the Cooperative Agreement. Permittee and its assigns shall store and use hazardous materials only as prescribed by federal law. Liability for release of a hazardous material shall be in accord with applicable Federal and state law.

To the extent that the Pemittee requires its contractors or consultants to indemnify, defend, and hold the Permittee harmless from any damages and claims resulting from the release of hazardous materials on the permit area occurring while Permittee or its contractors are in possession of the permit area, or elsewhere if caused by Permittee's contractors acting for or on Permittee's behalf, Permittee shall also require such contractors or consultants to indemnify the State. These covenants shall survive the expiration or earlier termination of this permit.

- 13. In the event of an alleged violation of this permit, the State will contact the Director of the Institute of Pacific Islands Forestry (or other designated official of the USDA Forest Service) with notice of such violation and a reasonable time permitted to cure the violation.
- 14. Disputes shall be resolved by the Station Director, Pacific Southwest Research Station, USDA Forest Service, and the Board of Land and Natural Resources. Disputes involving Laupāhoehoe Natural Area Reserve shall be taken to the Natural Area Reserve System Commission first for their recommendation to the Board of Land and Natural Resources.

IN WITNESS WHEREOF, the STATE OF HAWAII, by its Board of Land and Natural Resources, has caused the seal of the Department of Land and Natural Resources to be hereunto affixed and the parties hereto have caused these presents to be executed the day, month and year first above written.

## STATE OF HAWAII By \_\_\_\_\_ Chairperson of the Board of Land and Natural Resources Approved by the Board of Land and Natural Resources at its meeting held on \_\_\_\_\_ USDA FOREST SERVICE James Sedell, Station Director Pacific Southwest Research Station APPROVED AS TO FORM: Deputy Attorney General State of Hawaii Dated:

#### Exhibit A to Permit

The following activities, when undertaken by the Forest Service or its assigns pursuant to actions authorized in accordance with the provisions of the Cooperative Agreement for research between the State of Hawaii and the Forest Service, are authorized by this Permit. For purposes of this Exhibit A, "nondestructive" means an activity that does not destroy or harm the object of analysis.

- Operations and maintenance of buildings, dormitories, work areas, demonstration/education buildings, storage facilities, and management structures on experimental forest lands or other state lands encumbered under lease, license or permit.
- 2. Minor modification of existing buildings, work areas, demonstration/education facilities, and storage facilities to improve their usefulness as per the cooperative agreement, or to provide for public and worker safety.
- 3. Maintenance or modification of landscaping and other minor land and vegetation improvements around buildings, work areas, storage facilities on experimental forest lands to improve site use or public safety, including cutting and/or removal of vegetation, and use of pesticides and herbicides to maintain landscaping.
- Cutting and/or removal of exotic/nonnative vegetation and animals or use of pesticides and herbicides to control or prevent the establishment or spread of invasive species.
- 5 Maintenance and operation of all facilities and improvements that are used by the U.S. Forest Service or its assigns, or those installed under research permits as per agreement of the Forest Service.
- 6. Maintenance of existing roads to facilitate access and diminish ecological damage from roads in poor condition, including the cutting or removal of roadside vegetation, and use of herbicides and pesticides in road right-of-way.
- Maintenance of the existing trail system facilitate access, minimize trampling damage and insure safety of users, including the cutting or removal of roadside vegetation, and use of herbicides and pesticides in the trail corridor.
- 8. To participate in or conduct hikes, nature study, or other passive recreational activities.
- 9. Non-destructive inventory and monitoring of basic resources of experimental forest lands.
- 10. To lead site tours or provide access to school children, land managers, natural resource professionals, and the general public for forest education purposes and demonstration projects.

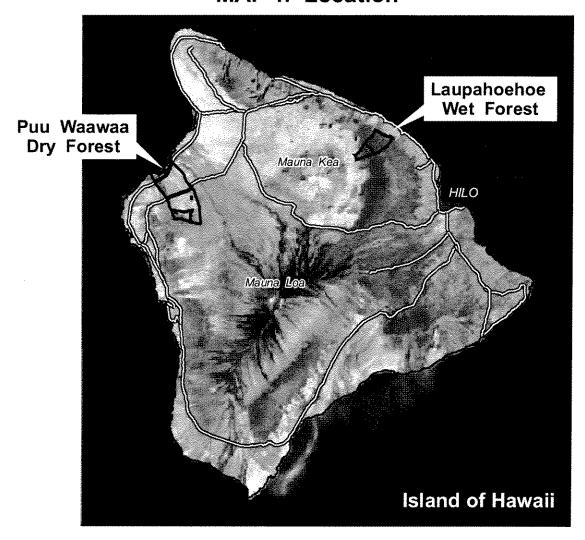
- 11. Installation and maintenance of directional and informational signs for worker, visitor, and public use and safety.
- 12. Monitoring of public use and environmental conditions in and around public use facilities, including placement of temporary electronic devices for environmental monitoring or sampling (for periods ≤36 months), and the sampling of air and gasses (plant and soil respiration) within the experimental forest.
- 13. Use of motorized or unmotorized vehicles and equipment off established roads and trails or other designated vehicle-areas for approved management and research plan activities or to respond to emergency situations.

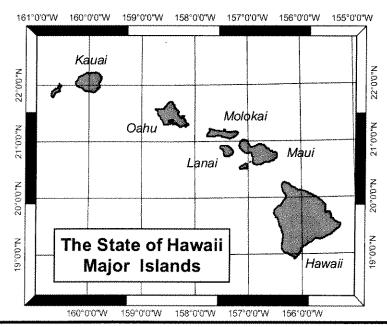
The following eleven activities are also authorized by this permit when undertaken by the Forest Service or its assigns pursuant to research actions authorized by the Hawaii Experimental Tropical Forests Research Committee in accordance with the provisions of the Cooperative Agreement for research between the State of Hawaii and the Forest Service.

- 14. Non-destructive inventory, measurements, censuses, and monitoring of trees, ferns, understory plants, birds, mammals, insects, and aquatic organisms where there is no harm to the organisms (includes both ground-based and remotely sensed measures).
- 15. Non-destructive inventory, measurements, and monitoring of the forest floor, dead and downed wood, and soils.
- 16. Non-destructive inventory, measurements, and monitoring of streams, ponds, and other aquatic ecosystems.
- 17. Nondestructive hydrological and geomorphic studies which do not involve the erection of structures or long term placement of equipment.
- 18. Erection of small protective fences and barriers ≤10 acre in area (and the removal of exotic species within such plots).
- 19. Construction of temporary blinds and field observation structures.
- 20. Soil and plant nutrient cycling research.
- 21. Biocontrol research to control invasive plants and animals manipulate densities of state and federally permitted biocontrol agents through redistribution and experimental methods, including caging plants or parts of plants.
- 22. Introduction and use of carbon, oxygen, nitrogen and other isotopes for research.
- 23. Non-destructive collection of plant material (excluding all listed T&E plants), soils, and water samples for laboratory analysis.

24. Collection of plant and insect samples that are from common, exotic, and abundant taxa for laboratory, greenhouse, or herbarium sampling (excluding all listed T&E species).

### MAP 1. Location

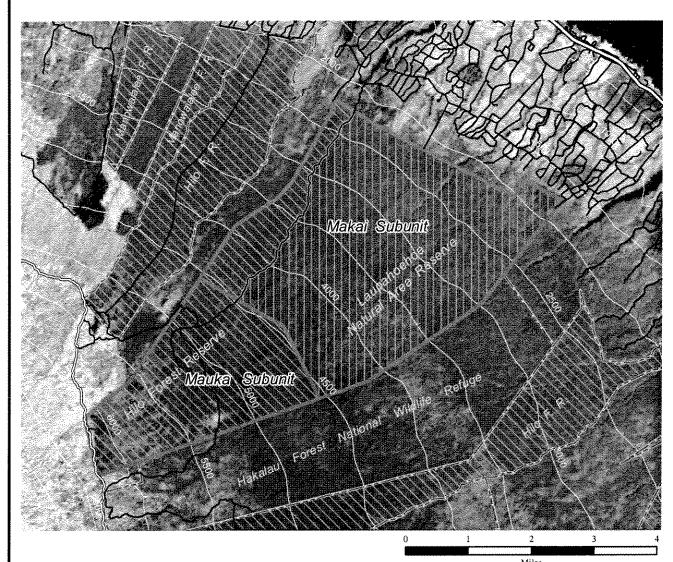


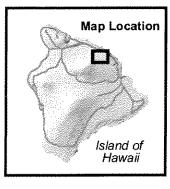




State of Hawaii
Department of Land and Natural Resources
Division of Forestry and Wildlife
Map No. FW - 0669 (08/2006)
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# MAP 2. Laupahoehoe Wet Forest: Subunits and Geography





### Legend

HETF Boundary

Sometimes Forest Reserve

Natural Area Reserve

——— Major Road

Secondary Road

---- Minor Road and Trail

Stream

500-Foot Contour

Data Source: Landsat; State of Hawaii GIS.

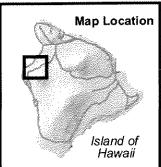




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# MAP 3. Puu Waawaa Dry Forest : Subunits and Geography





HETF Boundary

Game Management Area

Bird Sanctuary

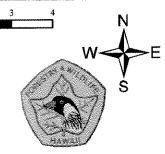
Major Road

Minor Road and Trail

Stream

500-Foot Contour

Data Source : Landsat; State of Hawaii GIS.



Miles

State of Hawaii
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Division of Forestry and Wildlife
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